Abstract

A system and method is directed to providing an n-dimensional entity for encoding and storing data securely. A user provides a cursor position within the n-dimensional entity, and a user seed to a pseudo-random number generator. The user seed may be combined with a fingerprint of a computing system in which the invention operates. The n-dimensional entity is populated with bits from the pseudo-random number generator. Bits within the n-dimensional entity are associated with actions to be performed at each cursor position. Subsequent cursor directions within the n-dimensional entity are determined using a random number generator. Plaintext is bitwise translated to a direction and an offset from the cursor position to a bit matching the plaintext bit within the n-dimensional entity. The offset is employed to modify a row of truly random bits in an encoded array.